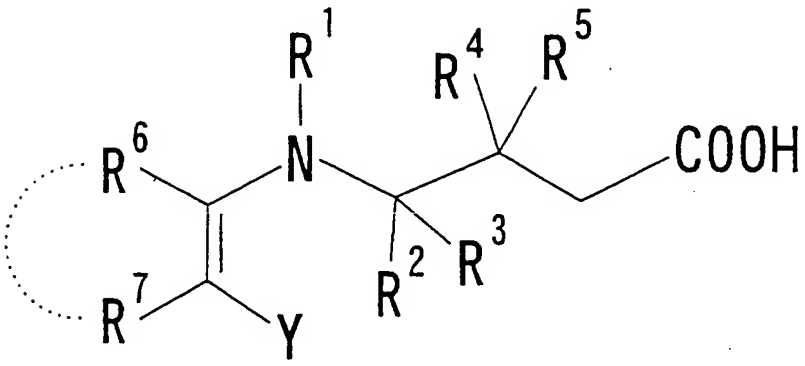
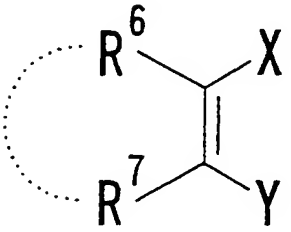
In the Claims

Please substitute the following claims 8 and 12 for the claims 8 and 12 now pending in the above-identified application.

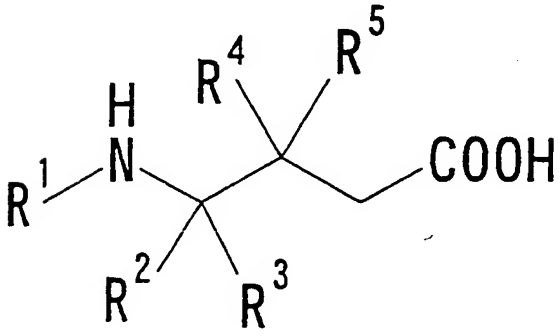
1. (Withdrawn) A process for the preparation of a compound of the formula:



wherein each variable is as defined below, or a salt thereof, characterized in that a compound of the formula:



wherein X is a halogen atom; Y is an electron-withdrawing group; R^6 and R^7 are independently a hydrogen atom, a halogen atom, an optionally substituted amino group, an optionally substituted hydroxyl group, an optionally substituted thiol group, an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group; or R^6 and R^7 may form a ring, or a salt thereof, is allowed to react with a compound of the formula:



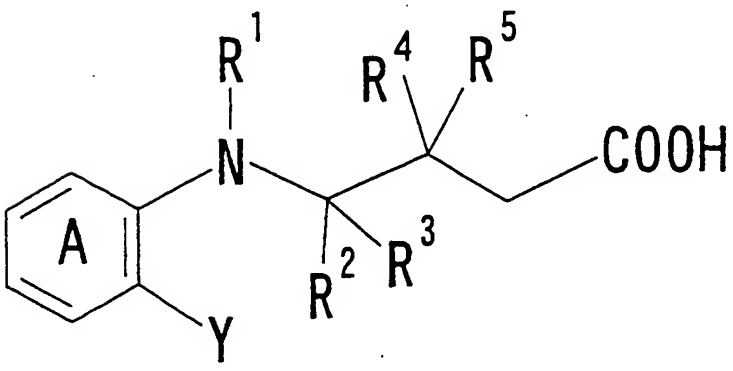
wherein R^1 is an optionally substituted hydrocarbon group, an optionally substituted acyl group, or an optionally substituted sulfonyl group; R^2, R^3, R^4, and R^5 are independently a hydrogen atom, a halogen atom, an optionally substituted amino group, an optionally substituted hydroxyl group, an optionally substituted thiol group, an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group; or R^1 and R^2, R^1 and R^4, R^2 and R^3, R^4 and R^5, or R^2 and R^4 may form a ring, or a salt thereof.

2. (Withdrawn) The preparation process according to claim 1, wherein Y is an optionally substituted acyl group.

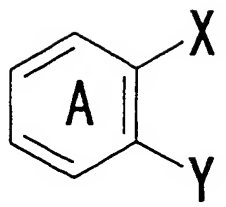
3. (Withdrawn) The preparation process according to claim 1, wherein R^2, R^3, R^4, and R^5 are hydrogen atoms.

4. (Withdrawn) The preparation process according to claim 1, wherein R^1 is an optionally substituted hydrocarbon group.

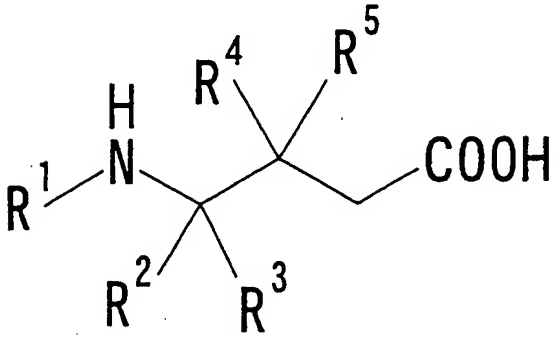
5. (Withdrawn) A process for the preparation of a compound of the formula:



wherein each variable is as defined below, or a salt thereof, characterized in that a compound of the formula:

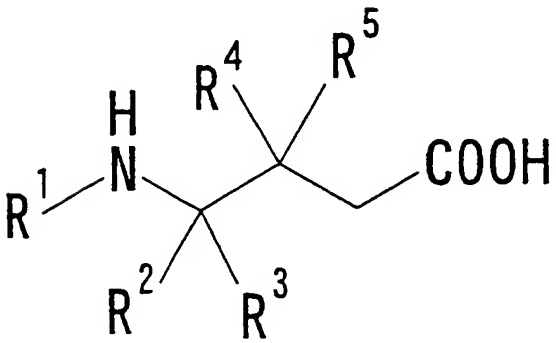


wherein X is a halogen atom; Y is an electron-withdrawing group; and ring A is an optionally substituted benzene ring, or a salt thereof, is allowed to react with a compound of the formula:

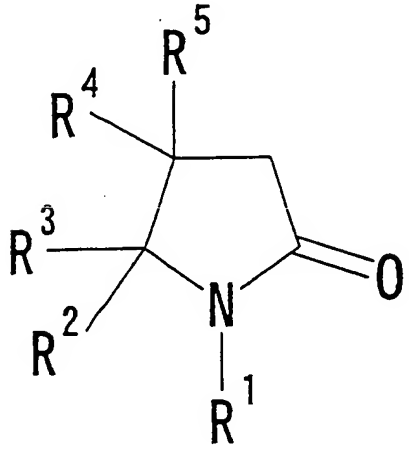


wherein R^1 is an optionally substituted hydrocarbon group, an optionally substituted acyl group, or an optionally substituted sulfonyl group; R^2, R^3, R^4, and R^5 are independently a hydrogen atom, a halogen atom, an optionally substituted amino group, an optionally substituted hydroxyl group, an optionally substituted thiol group, an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group; or R^1 and R^2, R^1 and R^4, R^2 and R^3, R^4 and R^5, or R^2 and R^4 may form a ring, or a salt thereof.

6. (Withdrawn) The preparation process according to claim 1, characterized in that a compound of the formula:

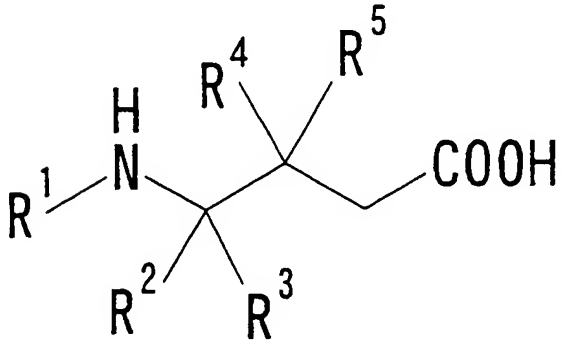


wherein each variable is as defined in claim 1, or a salt thereof, is used, which is obtained by hydrolyzing a compound of the formula:

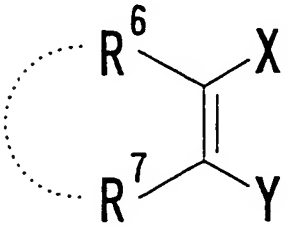


wherein each variable is as defined in claim 1, or a salt thereof.

7. (Withdrawn) The preparation process according to claim 6, characterized in that the compound of the formula:

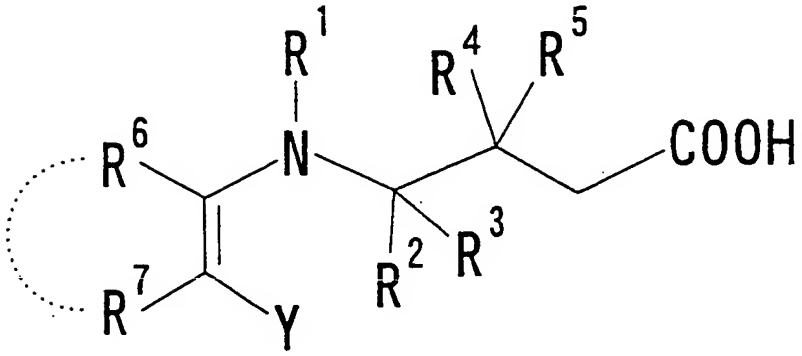


wherein each variable is as defined in claim 1, or a salt thereof, is subjected, without being isolated, to the reaction with the compound of the formula:



wherein each variable is as defined in claim 1, or a salt thereof.

8. (Currently Amended) A compound of the formula:



wherein Y is ~~an optionally substituted acyl group~~ **$-(CO)R^{20}$,**

wherein R^{20} is a hydrogen, or C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl or phenyl-C_{1-4} alkyl, which may be substituted with 1 to 3 substituents selected from the group consisting of

(1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono-C_{1-4} alkyl-carbamoyl, (15) di-C_{1-4} alkylcarbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl;

R^1 is

an optionally substituted hydrocarbon group **selected from the group consisting of C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl and phenyl-C_{1-4} alkyl group**,

an optionally substituted acyl group, or

an optionally substituted sulfonyl group;

R^2, R^3, R^4, R^5, R^6, and R^7 are independently

a hydrogen atom,

a halogen atom,

an optionally substituted amino group **wherein said amino group is optionally substituted with one or two substituents selected from the group consisting of C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl and phenyl-C_{1-4} alkyl, which may be substituted with 1 to 3 substituents selected from the group consisting of (1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono-C_{1-4} alkylcarbamoyl, (15) di-C_{1-4} alkyl carbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl; or 5- to 7- membered cyclic amino**,

an optionally substituted hydroxyl group,

an optionally substituted thiol group,

an optionally substituted hydrocarbon group **selected from the group consisting of C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl or phenyl-C_{1-4} alkyl group**, or

an optionally substituted **5- to 7-membered aromatic** heterocyclic group **or a saturated or unsaturated non-aromatic heterocyclic ring, containing at least one to three kinds of heteroatoms selected from the group consisting of an oxygen atom, a sulfur atom and a nitrogen atom**;

or R^1 and R^2, R^1 and R^4, R^2 and R^3, R^4 and R^5, R^2 and R^4, or R^6 and R^7 may form a ring,

wherein said optionally substituted hydrocarbon group and said optionally substituted heterocyclic group may each independently be substituted with 1 to 3 substituents selected from the group consisting of (1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono-C_{1-4} alkyl-carbamoyl, (15) di-C_{1-4} alkylcarbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl groups;

and wherein said optionally substituted acyl group, said optionally substituted sulfonyl group, said optionally substituted thiol group and said optionally substituted hydroxyl group may each independently be substituted with a C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl or phenyl-C_{1-4} alkyl, which may be substituted with 1 to 3 substituents selected from the group consisting of (1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6- membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono- C_{1-4} alkylcarbamoyl, (15) di-C_{1-4} alkylcarbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl,

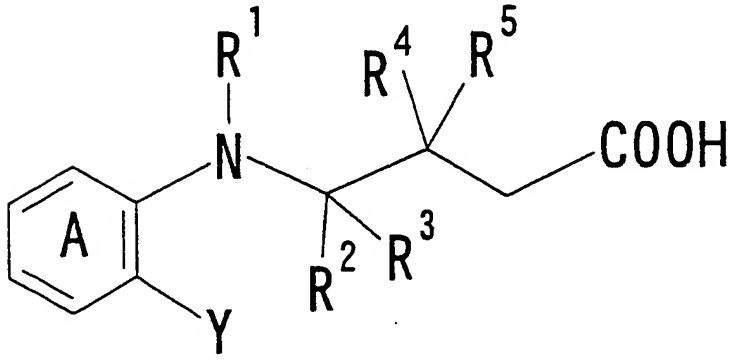
or a salt thereof.

Claim 9 (Cancelled)

10. (Original) The compound according to claim 8, wherein R^2, R^3, R^4, and R^5 are hydrogen atoms.

11. (Original) The compound according to claim 8, wherein R^1 is an optionally substituted hydrocarbon group.

12. (Currently Amended) A compound of the formula:



wherein Y is ~~an optionally substituted acyl group~~ **-(CO)R^{20},**

wherein R^{20} is a hydrogen, or C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl or phenyl-C_{1-4} alkyl, which may be substituted with 1 to 3 substituents selected from the group consisting of

(1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5-

to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono-C_{1-4} alkyl-carbamoyl, (15) di-C_{1-4} alkylcarbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl;

ring A is an optionally substituted benzene ring;

R^1 is an optionally substituted hydrocarbon group **selected from the group consisting of C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl and phenyl-C_{1-4} alkyl group**,

an optionally substituted acyl group,

or an optionally substituted sulfonyl group;

R^2, R^3, R^4, and R^5 are independently

a hydrogen atom,

a halogen atom,

an optionally substituted amino group **wherein said amino group is optionally substituted with one or two substituents selected from the group consisting of C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl and phenyl-C_{1-4} alkyl, which may be substituted with 1 to 3 substituents selected from the group consisting of (1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono-C_{1-4} alkylcarbamoyl, (15) di-C_{1-4} alkyl carbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally**

substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl; or 5- to 7- membered cyclic amino,

an optionally substituted hydroxyl group,

an optionally substituted thiol group,

an optionally substituted hydrocarbon group **selected from the group consisting of C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl or phenyl-C_{1-4} alkyl group,**

or an optionally substituted **5- to 7-membered aromatic** heterocyclic group **or a saturated or unsaturated non-aromatic heterocyclic ring, containing at least one to three kinds of heteroatoms selected from the group consisting of an oxygen atom, a sulfur atom and a nitrogen atom;**

or R^1 and R^2, R^1 and R^4, R^2 and R^3, R^4 and R^5, or R^2 and R^4 may form a ring,

wherein said optionally substituted hydrocarbon group and said optionally substituted heterocyclic group may each independently be substituted with 1 to 3 substituents selected from the group consisting of (1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono-C_{1-4} alkyl-carbamoyl, (15) di-C_{1-4} alkylcarbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl groups;

and wherein said optionally substituted acyl group, said optionally substituted sulfonyl group, said optionally substituted thiol group and said optionally substituted hydroxyl group may each independently be substituted with a C_{1-10} alkyl, C_{3-7} cycloalkyl, C_{2-10} alkenyl, C_{3-7} cycloalkenyl, C_{2-10} alkynyl, C_{6-14} aryl or phenyl-C_{1-4} alkyl, which may be substituted with 1 to 3 substituents selected from the group consisting of (1) halogen, (2) nitro, (3) cyano, (4) hydroxyl group, (5) thiol, (6) C_{1-4} alkylthio, (7) amino, (8) mono-C_{1-4} alkylamino, (9) di-C_{1-4} alkylamino, (10) 5- to 6-membered cyclic amino, (11) carboxyl, (12) C_{1-4} alkoxycarbonyl, (13) carbamoyl, (14) mono- C_{1-4} alkylcarbamoyl, (15) di-C_{1-4} alkylcarbamoyl, (16) C_{1-4} alkyl optionally substituted with a halogen atom or C_{1-4} alkoxy, (17) C_{1-4} alkoxy optionally substituted with a halogen atom or C_{1-4} alkoxy, (18) formyl, (19) C_{2-4} alkanoyl, (20) C_{1-4} alkylsulfonyl and (21) C_{1-4} alkylsulfinyl,

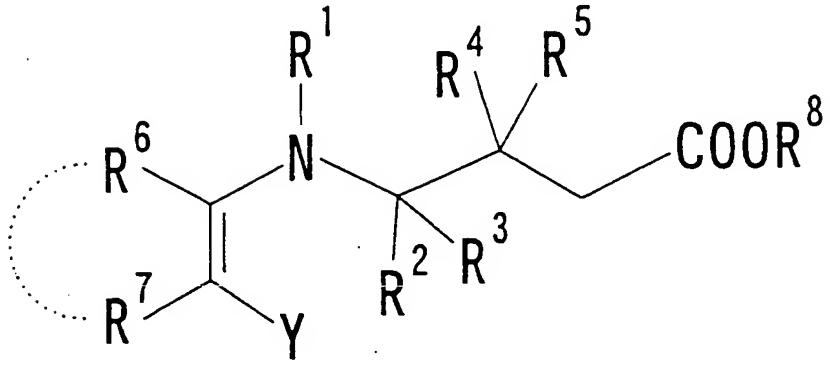
or a salt thereof.

Claim 13 (Cancelled)

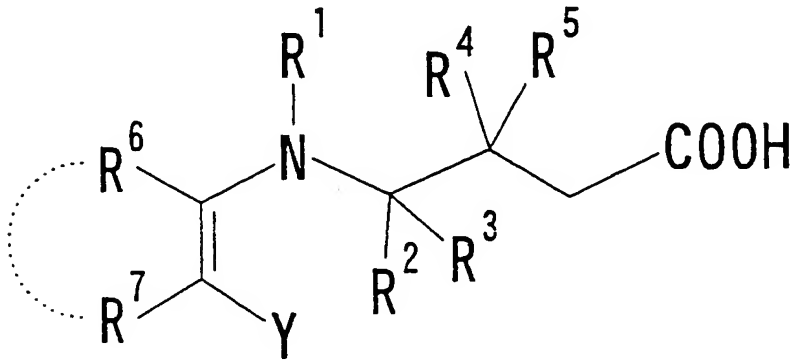
14. (Original) The compound according to claim 12, wherein R^2, R^3, R^4, and R^5 are hydrogen atoms.

15. (Original) The compound according to claim 12, wherein R^1 is an optionally substituted hydrocarbon group.

16. (Withdrawn) A process for the preparation of a compound of the formula:



wherein R^8 is an optionally substituted hydrocarbon group and the other variables are as defined below, or a salt thereof, characterized in that a compound of the formula:



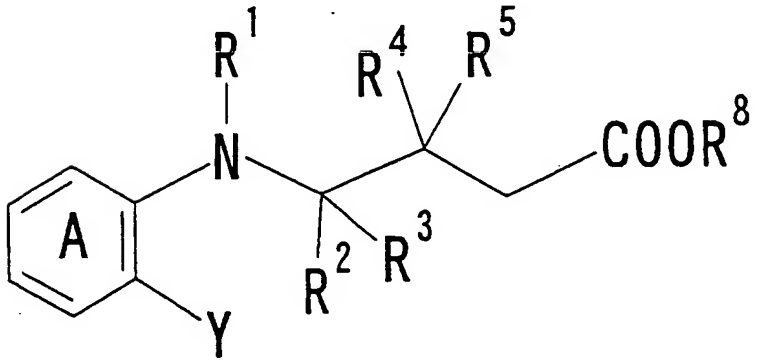
wherein each variable is as defined in claim 1, or a salt thereof, which is obtained by the preparation process according to claim 1, is subjected to esterification.

17. (Withdrawn) The preparation process according to claim 16, wherein Y is an optionally substituted acyl group.

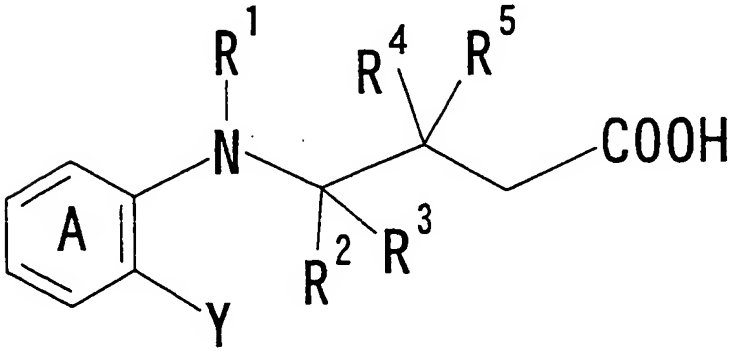
18. (Withdrawn) The preparation process according to claim 16, wherein R^2, R^3, R^4, and R^5 are hydrogen atoms.

19. (Withdrawn) The preparation process according to claim 16, wherein R^1 is an optionally substituted hydrocarbon group.

20. (Withdrawn) A process for the preparation of a compound of the formula:

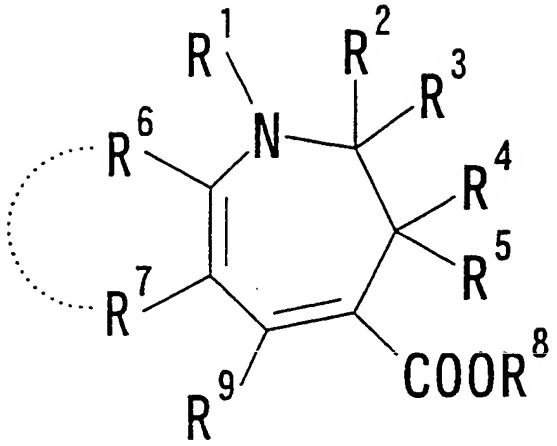


wherein R^8 is an optionally substituted hydrocarbon group and the other variables are as defined below, or a salt thereof, characterized in that a compound of the formula:

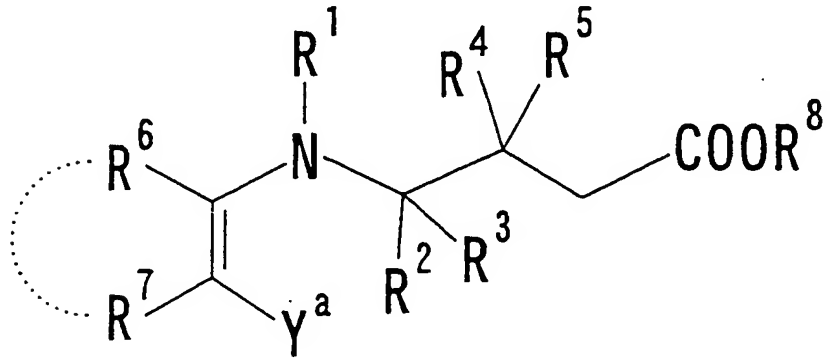


wherein each variable is as defined in claim 5, or a salt thereof, which is obtained by the preparation process according to claim 5, is subjected to esterification.

21. (Withdrawn) A process for the preparation of a compound of the formula:



wherein R^9 is a hydrogen atom or an optionally substituted hydrocarbon group, and the other variables are as defined below, or a salt thereof, characterized in that a compound of the formula:



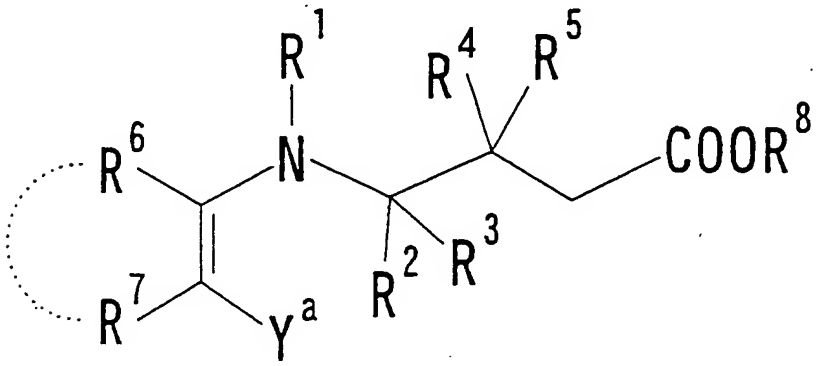
wherein Y^a is a group of formula $-COR^9$ wherein R^9 is a hydrogen atom or an optionally substituted hydrocarbon group, and the other variables are as defined in claim 16, or a salt thereof, which is obtained by the preparation process according to claim 16, is subjected to ring-closing reaction.

22. (Withdrawn) The preparation process according to claim 21, wherein R^9 is a hydrogen atom.

23. (Withdrawn) The preparation process according to claim 21, wherein R^2, R^3, R^4, and R^5 are hydrogen atoms.

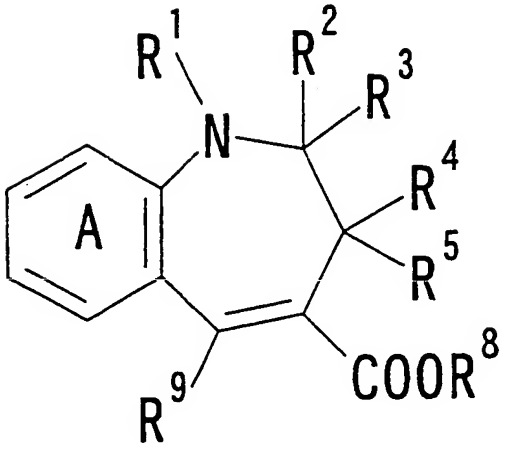
24. (Withdrawn) The process according to claim 21, wherein R^1 is an optionally substituted hydrocarbon group.

25. (Withdrawn) The preparation process according to claim 21, characterized in that a compound of the formula:

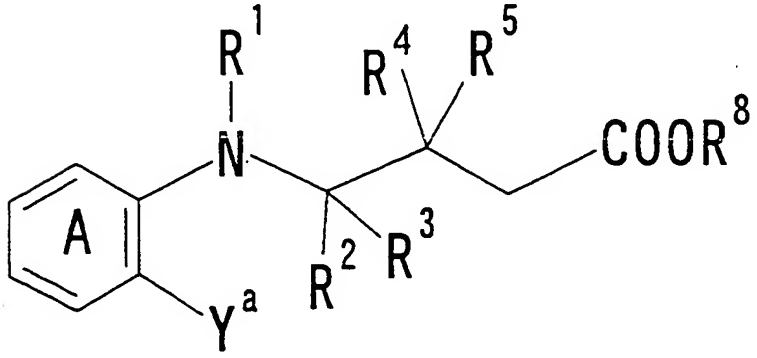


wherein Y^a is a group of formula $-COR^9$ wherein R^9 is a hydrogen atom or an optionally substituted hydrocarbon group, and the other variables are as defined in claim 16, or a salt thereof, which is obtained by the preparation process according to claim 16, is subjected, without being isolated, to ring-closing reaction.

26. (Withdrawn) A process for the preparation of a compound of the formula:



wherein R^9 is a hydrogen atom or an optionally substituted hydrocarbon group, and the other variables are as defined below, or a salt thereof, characterized in that a compound of the formula:



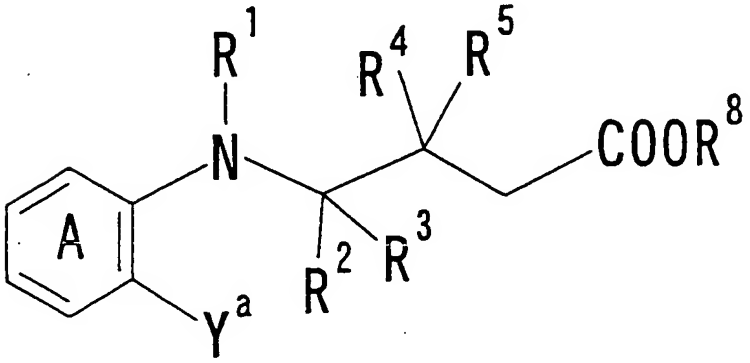
wherein Y^a is a group of formula -COR^9 wherein R^9 is a hydrogen atom or an optionally substituted hydrocarbon group, and the other variables are as defined in claim 20, or a salt thereof, which is obtained by the preparation process according to claim 20, is subjected to ring-closing reaction.

27. (Withdrawn) The preparation process according to claim 26, wherein R^9 is a hydrogen atom.

28. (Withdrawn) The preparation process according to claim 26, wherein R^2, R^3, R^4, and R^5 are hydrogen atoms.

29. (Withdrawn) The preparation process according to claim 26, wherein R^1 is an optionally substituted hydrocarbon group.

30. (Withdrawn) The preparation process according to claim 26, characterized in that a compound of the formula:



wherein Y^a is a group of formula $-COR^9$ wherein R^9 is a hydrogen atom or an optionally substituted hydrocarbon group, and the other variables are as defined in claim 20, or a salt thereof, which is obtained by the preparation process according to claim 20, is subjected, without being isolated, to ring-closing reaction.